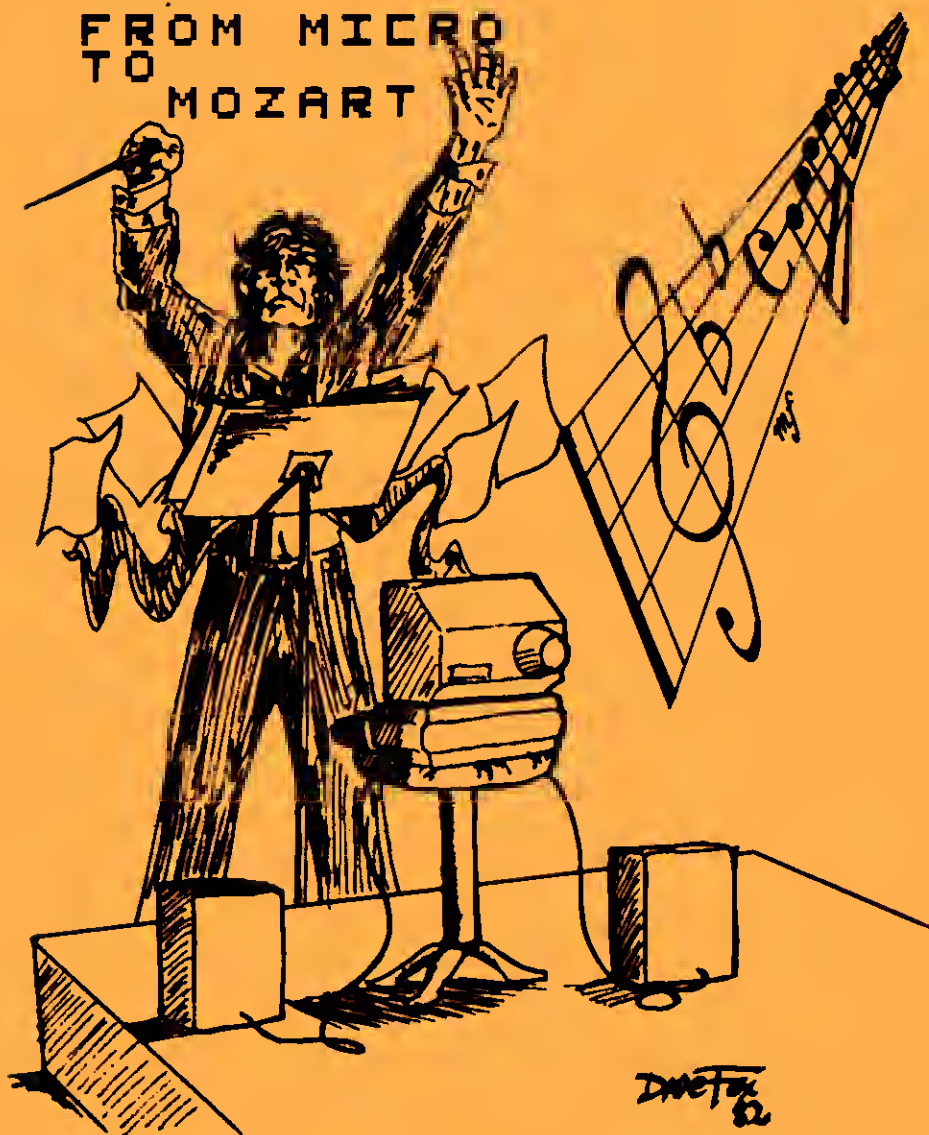


MAY 1982

TRS-80TM NEWSLETTER

SOUTH BAY - USERS GROUP

FROM MICRO
TO
MOZART



South Bay TRS-80 Users Group

Page - Contents

1. Notes on SBUG-80: Entering application
2. A Control Utility For Your MX-80
4. Music-Lovers, Composers And Musicians -- Solutions!
7. Using NEWDOS/80 V.2 Dynamic Merge And Sort Options
10. The Parallel Printer Port

SBUG meetings are held the 3rd Tuesday of each month in the north east corner of Dysans' building at:

Time - 7:15 to 10:30 PM
5401 Patrick Henry Drive
Santa Clara, Ca

May 10, June 15, July 20

- Features: 1) Phil Coffman our M.C. has arranged some special guest speakers.
2) Open Rap session.

**** Your Steering Committee follows ****

Discussion Leaders:	SBUG-80 Username	Phone
Phill Coffman	(CAP)	(408) 997-0247
Mike McHenry	(MCBENRY)	(408) 245-4704
Gerry McKee	(GMCKEE)	(408) 926-4063
Sabri Kawash	(SABRI)	(408) 732-5484
Bill Richeraon	(OPTOBILL)	(408) 257-8267
Treasurer:		
Larry Gunderson	(TREAS)	(408) 259-5349
Newsletter Editor:		
Robert Byrd	(EDITOR)	(408) 732-6775
Librarians:		
(disc)	Pets Buntsinger	(PETE) (408) 227-7125
(tape)	Bob Brown	(SAMBROWN) (408) 379-2774
(doc)	Ron Carpenter	(RON) (415) 726-3487

If this need arises feel free to give one of us a call.

Note on SBUG-80 Rost System:

RE: Entering an application for an account.

Apparently some people have been having some problems with "entering" an application for an account on SBUG-80. So, I will go over some of the basic guide lines that one should follow in order for the application to be accepted as quick as possible. First of all, the "USERNAME" and "PASSWORD" should be no more than 8 characters, UPPER CASE, and NO SPACES. A username is not your

May 82

first name (Eg. My username is BREWER for Eric Brewer.) The applicant will also have to enter their full name, current home address, city, state, and zip code. Also, one will be asked for their first name. This is used by the system when making any queries from the user. (NB: The "USERNAME" can be something unusual to IE. ZAPPER, etc...) The phone number for the system is 749-8810. If you have any further questions, please, feel free to contact either Robert Byrd (EDITOR), or me, Eric Brewer (BREWER).

=====

A CONTROL UTILITY FOR YOUR MX-80

When using the MX-80 with its GRAFTRAX features, I got tired of having to continually go to BASIC and look up control characters to operate the MX-80 and change the print parameters. I solved this problem with this utility program.

I chose the options that I most often wanted to use when I wrote this program. In addition, I have provided a way to reset the printer and clear all options. You do have to be aware, however, that there are some options that are not compatible with each other, but this shouldn't present a problem.

When assembling this program, you can pick your own origin based on your own system and needs. I picked F088H which keeps it below any high address driver I might have and still puts it out of the way of most programs I might be working with. If you want to put the program in with DEBUG or another monitor, you should be able to start at any address, since the program has only relative jumps in it. I have saved it as PRINTER/CMD and put it on my operating system disk. When I use it with BASIC, I have vectored the LINE command from within BASIC to access the routine. I will leave it to you to work that out for yourself if you wish to do this and perhaps poke it into memory from BASIC.

The program uses ROM calls, but might be compatible with Model III and its ROM calls. If not, it should be easy for you to look up the equivalent Model III addresses and substitute them when you assemble the program. In adapting the program for Model III, you will have to handle the sending and receiving of information to the printer. I am told that the peripherals on the Model III are addressed as ports and if this is true, you will have to take care of that in the code that addresses the printer memory address for the Model I in the program.

I hope that you will find it as enjoyable as I do to just type "PRINTER" and be able to preset the MX-80 for the modes you want. If you have forgotten to turn on the printer, the program will even remind you to do that and let you escape if you wish.

For those who wish to use the program "as is" I have given a copy of it to the disk librarian and you can get it that way if you wish.

Ian Webb

South Bay TRS-80 Users Group

```

00100 ;*****
00110 ;PROGRAM TO SET MX-80 WITH GRAFTRAX TO PRINT NODBS
00120 ;* --- PRINTER/CMD --- IAN WEBB 3/13/82 *
00130 ;*****
00140 ;
F000 00150 ORG 0F800B ;STARTS BERE--DSB YOUR OWN
;ORIGIN
P000 CDC901 00160 CALL 1C9H ;CLEAR SCREEN
F003 3B00 00170 LD A,0 ;ZEROS IN PRINTER ADDR
F005 32E837 00180 LD (37E8B),A
P008 CD2B00 00190 START: CALL 002BB ;KEYBOARD INPUT SCAN
P00B FE46 00200 CP 'F' ;IS IT F?
F00D 2816 00210 JR Z,EXIT ;YES, EXIT
F00P 3AE837 00220 LD A,(37B0B) ;GET PRINTER ADDRESS INPO
F012 B6P0 00230 AND 0F0H ;MASK TO GET BIGH 4 BITS
F014 FB30 00240 CP 30B ;PRINTER ON?
F016 2833 00250 JR Z,BTRT ;YES, GO AHEAD
F018 212BF0 00260 LD HL,NOPE ;NOT ON PUT OUT MESSAGE
F01B 11003C 00270 LD DB,3C80H ;FIRST VIDEO LINE
F01E 012000 00280 LD BC,32D ;NUMBER OF CHAR IN MESSAGE
F021 EDB8 00290 LDIR ;PDT MESSAGE ON CRT
F023 18E3 00300 JR START ;LOOP BACK
F025 CDC901 00310 EXIT: CALL 01C9B ;CLEAR SCREEN
F028 C32D40 00320 JP 402DB ;EXIT TO DOS
F02B 54 00330 NOPE: DEFM 'TORN ON PRINTER OR KEY F TO EXIT'
F04B CDC901 00340 BTRT: CALL 01C9H ;CLEARS SCREEN
F04E 21A5F0 00350 LD BL,NESS ;MESSAGE ADDRBS
F051 11403C 00360 LD DB,3C40B ;NESS DESTINATION=2ND CRT
;LINE
F054 013700 00370 LD BC,55D ;MESSAGB LENGTH
F057 EDB0 00380 LDIR ;PUT MESS ON SCREEN
F059 21DCP0 00390 LD BL,MESS1 ;SECONU NBSAGE LINE ADDR
F05C 11803C 00400 LD DE,3C80B ;3RD SCREEN LINE ADDR
F05F 013700 00410 LD BC,55D ;MESSAGE LENGTH
F062 EDB0 00420 LDIR ;NOVE MESS TO SCRBN
F064 2192F0 00430 BEGIN: LD BL,TAB ;ADDR OF LOOKDP TABLE
F067 81A4F0 00440 LD BC,TAB3 ;ADDR OF KEY CODE TABLE + 1
F06A CD4900 00450 KBD: CALL 0049H ;GET INPDT
F06D FE46 00460 CP 'P' ;DONE?
F06P CA2D40 00470 JP Z,402DB ;DONE GO TO DOS READY
F072 160A 00480 LD D,18D ;INITIALIZE CTR = # KEY
;POSS + 1
F074 15 00490 COMP: DEC D ;BTEP CTR
F075 20ED 00500 JR Z,BEGIN ;NO MATCH AT ALL
F077 EDAL 00510 CPI ;COMPARB,STEP BL DP, BC
;DOWN
F079 20P9 00520 JR NZ,COMP ;NO MATCH
F07B C5 00530 PDSB BC ;MATCH1-SAVE BC=PTR TO
;PRINT CODE
F07C CD3A03 00540 CALL 033AB ;SCREEN DIBLAY
F07F 3B1B 00550 LD A,1BB ;ESCAPE CODE
F001 CD3B00 00560 CALL 003BH ;TO PRINTER
F004 C1 00570 POP BC ;GET BACK PTR CODE POINTBR
F005 C5 00580 PUSH BC ;SAVB AGAIN

```

May 82

```

F006 0A      00590      LD      A,(BC) ;FUT PRINT CODE IN A
F007 CD3B00  00600      CALL    003BB ;TO PRINTER
F00A C1      00610      POF      BC ;GET PRINT CODE AGAIN
F00B 0A      00620      LD      A,(BC) ;FUT INTO A REG
F00C FE40    00630      CF      '0' ;IS IT A RESET?
F00E 20BH    00640      JR      Z,STRT ;YES, CLEAR SCREEN
F000 10D2    00650      JR      BEGIN ;NO MATCH, GO BACK
F092 43      00660 TAB:  DEFM    'CXIERD07T';LOOKUP TABLE FOR KEYS
F09B 3A      00670 TAB1: DEFM    ':10G0E4SF';LOOKUP TABLE FOR PTR
                                ;CODES
0001      00680 TAB3:  DEFS     1 ;LABEL NO ON ADDR TAB1 + 1
F0A5 43      00690 MESS: DEFM    'C)OMPRESSED X)PAND0D I)TALIC
E)MFBASIZED R)ESET F)INISH';SCREEN MESSAGE ON LINE 2
F0DC 44      00700 MESS1: DEFM    'D)OUBLE STRIKE 0)LINES/IN 7)/72
PER LINE T)RS00 MODE';SCREEN MESSAGE FOR OPTION0
F000      00710      END      0F000H
=====

```

**** MUSIC-LOVERS, COMPOSERS AND MUSICIANS ****
 SALUTATIONS!

Bello there again, remember me? No? Well then let me reintroduce myself. I'm the friendly TRS00 user who just loves all those expensive peripherals for the TRS00, but hates to dig into his pocket to spend the money for it. So what I end up doing is building my own. Perhaps most of you know me from my last article (Feb 82) entitled "The joy of joysticking".

What am I up to now? Well, Mr Computerist, its time to turn that homely old TRS00 into a full fledged music synthesiser! Until now perhaps the only noise that came out of that silver and black box was a dull hum. With this schematic and the software available in the Tape library you will be able to transform your TRS00, giving it powers of articulation it never dreamed it had! Journey through the delicate melody of Dance of the Reed pipes by Tchaikovsky through the erratic harmony of Flight of the Bumble Bees, and into the Majestic Tempo of Raiders of the Lost Arc! If you are a Bulletin Board uer, how many times have you looked through the program listing available for download only to turn green with envy at the amount of files with the extention : /ORC. Your days of envy are over, its time to sing along with Tandy!

Before I go on I would just like to say that this is not an exact duplicate of that "other" synthesiaer but will provide the same, exact results. You will need a copy of the music syntheiaier program from the Taps library, a fairly good amplifier and about \$21.00 worth of merchandise. The songs that run on this synthesiser will be available in the Tape library and are 100% compatible with the other synthesiser and vice versa. This synthesiser will give you Mono sound (sorry stereo lovers) and No percussion. Also, this project is somewhat more complicated than my other project (joystick). So if you don't have basic electronic experience I advise you against taking on this project.

Now, my Micro-Composer, it is time to raise the curtain on Music

South Bay TRS-80 Users Group

synthesis for the TRS-80! Here is a list of parts excluding the software and a amplifier:

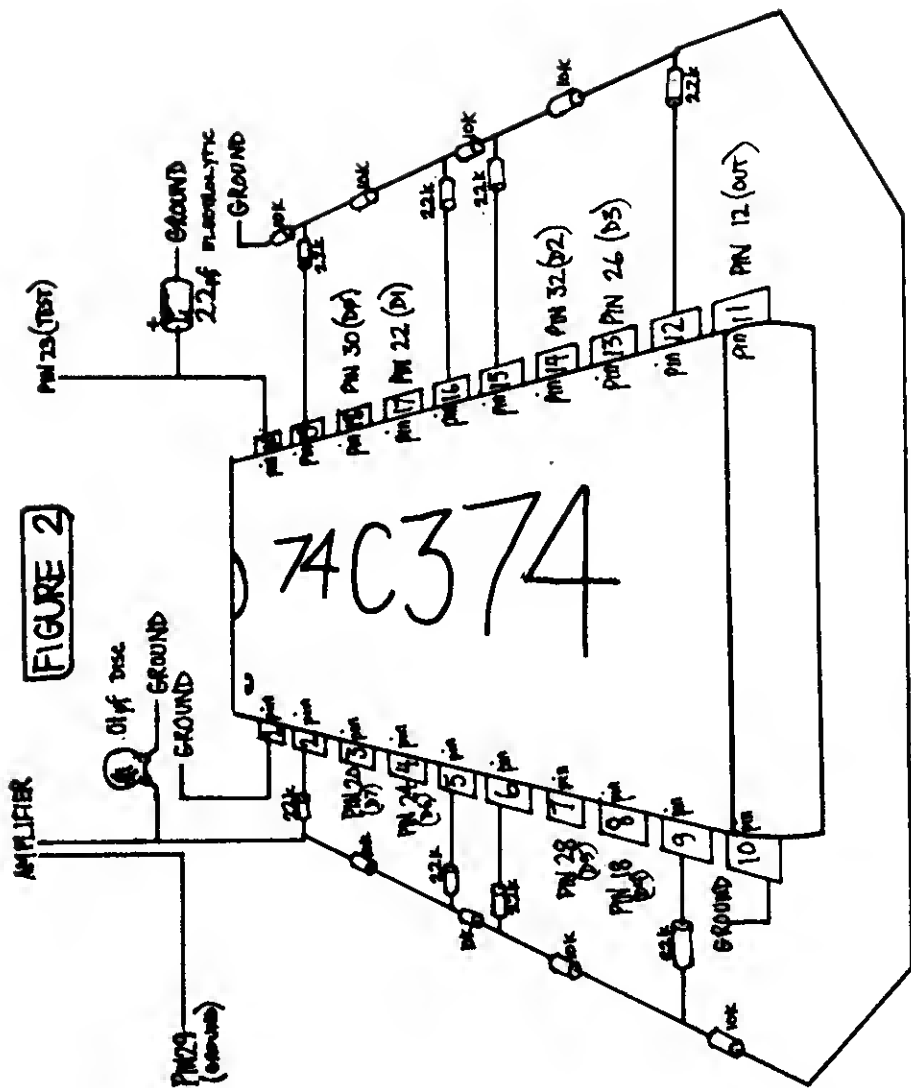
ITEM	QUAN	PRICE	R/S #
THE IC:			
74C374.....	1.....	\$ 2.00...	-----
IC socket			
IC socket - 20 pin.....	1.....	\$.59...	276-1991
Capacitor			
2.2uf electrolytic.....	1.....	\$.59...	272-1420
Capacitor			
.01uf disc.....	1.....	\$.39...	272-131
Resistors			
22k 1/4 watt 5%.....	8.....	\$.78...	271-1339
Resistors			
10k 1/4 watt 5%.....	8.....	\$.78...	271-1335
Connector			
40-pin edge card.....	1.....	\$ 4.95...	276-1558
Plug cable			
Audio phono plug.....	1.....	\$ 1.89...	42-2371
Data cable			
40-conductor ribbon.....	1.....	\$ 6.95...	278-771
Box			
good-looking box.....	1.....	\$ 2.50...	270-220-3

WOW, that seems like a lot of money! But just remember how much the "other" synthesizer costs! You're actually saving quite a bit by doing it yourself.

The first thing you will need to do is to locate the IC. You will not find this chip at Radio Shack, it is a special chip and it is hard to find. Also notice the "C" in the middle of the numbers, this is very important! The IC can be obtained at JDR Microdevices which is located right next to the Radio Shack Computer Center on Bascom:
1224 S. Bascom Av.

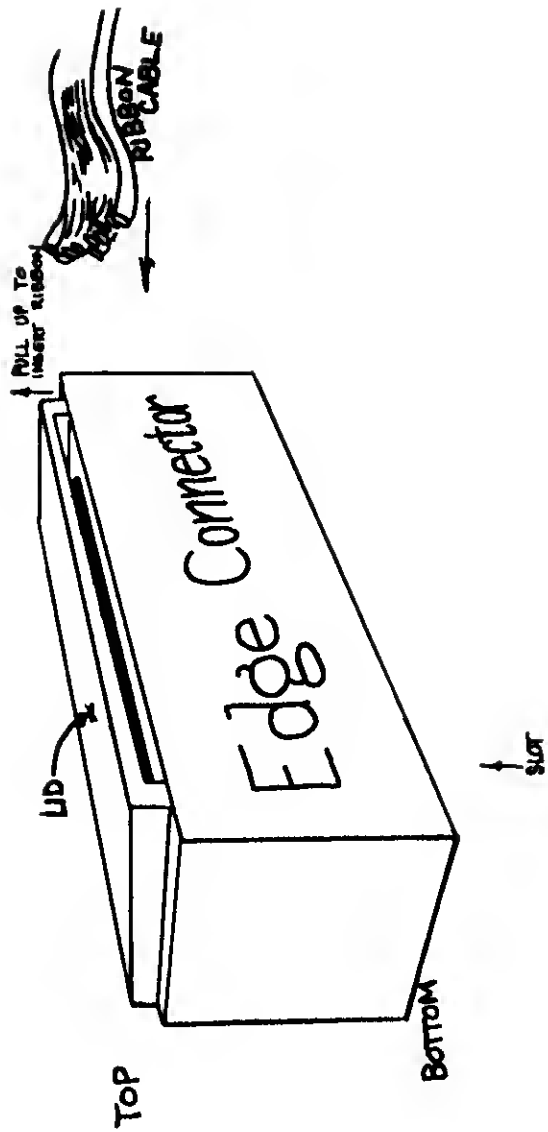
You should definitely mount this assembly on a circuit board and the IC should be inserted in an IC socket (20 pin). But solder the socket EMPTY first, then build the rest of the board and THEN, after the board is all built, insert the IC. The reason for this is that the IC is VERY fragile! And soldering on or around it will cause definite damage.

Now start making the resistor connections. Notice figure 1 & 2. Figure 1 is called a schematic diagram and is mainly for trouble shooting, but can be used for assembly. However, if you are a beginner at all this then I recommend you use the pictorial



74C374 EXPANDED VIEW
FOR "PIN" LOCATIONS SEE FIGURE 3

FIGURE 3



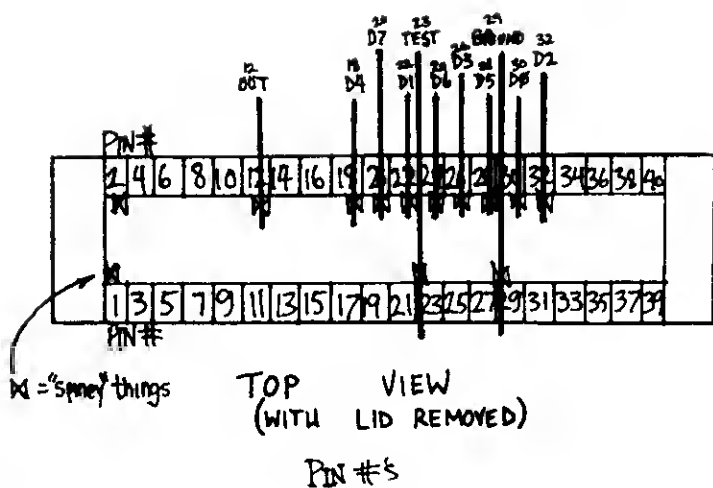


FIGURE 4

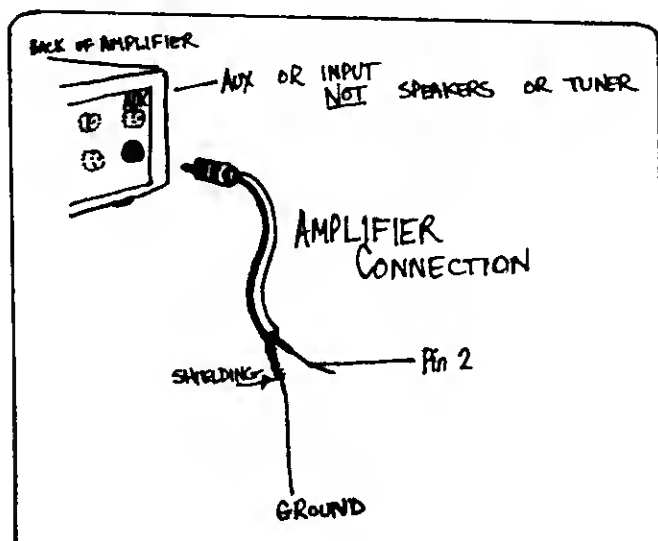


FIGURE 5

May 82

diagram, figure 2. Remember, you should be soldering the resistors to the empty IC socket. After you have made the resistor connections, start making the capacitor connections. Notice that the 2.2uf capacitor is polarized (it has a "-" and a "+" side). The positive (+) side connects to pin 20 of the IC and PIN 23 of the edge card connector (TRS00), while negative (-) goes to ground. It should be noted that all ground connections go to PIN 29 of edge connector. The disc capacitor (.01) is not polarized so it doesn't matter which way it goes.

Now to the HARD part of the assembly. As I said in my joystick article the Edge card connector assembly is the toughest part of the assembly. This is where you connect the appropriate IC pin number with the correct edge connector PIN number. Refer to figures 3 & 4 for this procedure. This procedure should be done SLOWLY and CAREFULLY and with patience! With the lid open, insert and puncture the individual ribbon cable wires onto the coordinating PIN "spiney" thing, then just close the lid. For more reference on this type of procedure see my previous article in the Feb 82 issue of the SBUG newsletter.

Next is the Sound connection. Connect the audio phono plug shielding to ground and the phono plug signal to pin 2. Next you'll need an amplifier (it doesn't need stereo) of some sort. Connect the phono plug into the Aux input of the amplifier or any other input EXCEPT phono, tuner, or tape (speakers are OUTPUTS).

All you need to do now is to connect the 40 pin connector to the expansion port (for 16k TRS00s without expansion board) or the screen printer port (for 32k or 48k TRS00s with expansion board). Remember, all connections should be made with POWER OFF! After you have connected Synth00 up, turn your power on and observe the screen. NOTHING SHOULD HAPPEN. If you get any fluttering of the screen or anything, turn the power off IMMEDIATELY. If nothing did happen then all your connections should be all right. If anything weird happened then you should check your connections or maybe you connected it upside-down. Since this assembly is a little more complicated than the joystick conversion I am not offering to assemble it myself (I don't have the time) but if you really just can't get it to work, bring it to the club and I'll take a look at it.

If you have plugged it in and nothing went wrong then your ready for the software, available at the disk or tape library. Full documentation for entering and composing music is included.

Now, the only thing left to do is to start composing!

Dave Fox
DAVEFOX @ SBUG-00

South Bay TRS-80 Users Group

Using NEWDOS88 V.2 Dynamic Merge and Sort Options To Improve the Performance of the Radio Shack Budget Management Program

I recently started using the Radio Shack Budget Management Program to organize my personal finances. This program consists of three major elements: 1) TRANS to enter check, deposit, charge and cash data, 2) EDIT to edit the data, and 3) REPORTS to print reports. To change from one element to the other it is necessary to save the data (which takes about 1 minute), run the desired program, and load the data again (another minute). I have eliminated this need to save and load the data each time by using the NEWDOS88 V.2 dynamic merge basic enhancement which will overlay the desired program elements while retaining all of the variables in memory. It now only takes a few seconds to change from one of the programs to any of the others.

I have also added some other features to the program to increase its speed and utility. The data entry in line 760 has been modified to prevent commas from being entered since they mess-up the subsequent loading of the files. In line 5505 a POKE 14312,7 is included to ring the printer bell (if you have one) if there is a data entry error. Also, a POKE 14305,0 in line 9480 will keep the drives from turning on and off during the loading of the files. Line 9010 has been changed so that the default save file name is the name of the last data file loaded. Type in a new name when you start a new month! The modifications of lines 2301-3001 in REPORTS are only for Epson MX-80 printers to give 132 column/line and 84 line/page output.

For tax and budgeting purposes I wanted to add the feature of summarizing all of the checks in a sorted order with subtotals for each expense account at the end of the year. I have included an option 6 in the REPORTS menu that will write a sorted file of all checks and cash expenses to a file (filename/AID). The Meta Technology AIDS3 data base system can be used to read these files (one for each month) and combine them into a single sorted file for the year. The MERGS3 subsystem can be used to combine 12 individual sorted files into a single sorted file with duplicate entries deleted (outstanding checks get carried over from one month to the next in TRANS). The CALCS3 or CALCS4 subsystems will read this file and print a report that lists the checks and cash expenses by account, description and date, with subtotals for each account. This is very handy at tax time.

Mike McHenry
MCHENRY @ SBUG-80

PROGRAM MODIFICATIONS

Merge these lines with EDIT

100 CLEAR(15000):DEFINTI-N:DEFSTRX ' INCREASE STORAGE FOR 48K
110 M1=99:M2=200:M3=25:M4=20:M5=M4
215 CMD"P",DELETE10000-10030

May 82

```
250 PRINTTAB(15)"8) LOAD REPORTS
"TAB(15)"9) LOAD TRANS"
270 IF (J=8ORJ=8) THENPRINT"BAVE YOU SAVED YDUR DATA (Y/N)";
:GOSDB300:IFYN=0 THEN220ELSEIFJ=8 THENGOTO274ELSE99:GOSDB5500
274 IF J=8 GOTO 12000 ' LOAD REPORTS
275 IF J=9 GOTO 11000 ' LOAD TRANS
760 W$=INKEY$:IFW$="" THEN760ELSEIFW$="," THEN760
9010 IPDK=1 THENPRINT"FILESPEC OF OUTPDT FILE:DEFAULT FILESPEC=
";:PRINT BF$, "
";:GOSDB750:IFB$="" THENB$=BF$:PRINT:OPEN"D",DV,B$:ONERRORGOTO0ELSEPR
INT:DPEN"D",DV,B$:ONERRDRGOTO0
9015 BF$=B$
9400 POKE11,I2:POKE14305,0:RETURN ' KEEPS DRIVES DN DDRING LOAD
9510 IPDK=1 THENPRINT"FILESPEC OF INPUT FILE:
";:GOSUB750:BF$=B$:PRINT:DPEN"I",DV,B$:ONERRORGOTO0
11000 CMD"F",DELETEL0-10030
11010 CMD"F",DELETEL2000-14000
11020 MERGE"TRANS"
11030 GOTO215
12000 CMD"F",DELETE 10-11030
12010 CMD"F",DELETEL3000-14000
12020 MERGE"REPORTS"
12030 GOTO215
13000 CMD"O",K2,C2%(1),C1%(1),C3$(1),C4(1),C5%(1),C6%(1):RETURN
14000 CMD"O",CK,C5%(1),C3$(1),C2%(1),C1%(1),C4(1),C6%(1):RETURN
```

Merge these lines with TRANS

```
-----
100 CLEAR(15000):DEPINTI-N:DEPBTR
110 M1=99:M2=200:M3=25:M4=20:M5=M4
215 CMD"F",DELETEL000-11030
250 PRINTTAB(15)"8) LOAD REPORTS
"TAB(15)"9) LOAD TRANS"
270 IF (J=8ORJ=8) THENPRINT"BAVE YOD SAVED YODR DATA (Y/N)";
:GOSDB300:IFYN=0 THEN220ELSEIFJ=8 THENGOTO274ELSE99:GOSUB5500
274 IF J=8 GOTO 12000
275 IF J=9 GOTO 11000
760 W$=INEEY$:IFW$="" THEN760ELSEIFW$="," THEN760
9010 IPDK=1 THENPRINT"FILESPEC OF OUTPUT FILE:DEPADLT FILESPEC=
";:PRINT BF$, "
";:GOSUB750:IFB$="" THENB$=BF$:PRINT:DPEN"D",DV,B$:DNERRORGOTO0ELBEPR
INT:OPEN"O",DV,B$:ONERRORGOTO0
9015 BF$=B$
9400 POKE11,I2:POKE14305,0:RETURN
9510 IPDK=1 THENPRINT"FILESPEC OF INPUT FILB:
";:GOSUB750:BF$=B$:PRINT:OPEN"I",DV,B$:ONERRORGOTO0
10000 CMD"F",DELETEL0-9910
10010 CMD"F",DELETEL1000-14000
10020 MERGB"EDIT"
10030 GOTO215
12000 CMD"F",DELETE 10-11030
12010 CMD"F",DELETEL3000-14000
12020 MERGE"REPORTS"
12030 GOTO215
13000 CMD"O",K2,C2%(1),C1%(1),C3$(1),C4(1),C5%(1),C6%(1):RETURN
14000 CMD"O",CK,C5%(1),C3$(1),C2%(1),C1%(1),C4(1),C6%(1):RETURN
```

South Bay TRS-80 Users Group

Merge these lines with REPORTS

```

100 CLEAR(15000):DEFINTI-N:DEFSTRX
110 M1=99:M2=200:M3=25:M4=20:M5=M4
120 X$=",":AD$=CHR$(25):EL$=CHR$(30):CD$=CBR$(27):BL$=CHR$(29)
215 CMD"F",DELETE12000-12030
220 CLB:PRINT:PRINTAB(10)"BUDGET MANAGEMENT - REPORT 1.0":PRINT
240 PRINTAB(15)"0" STOP
"TAB(15)"1" READ-IN MORE DATA
"TAB(15)"2" REPORT
"TAB(15)"3" LOAD EDIT
"TAB(15)"4" LOAD TRANS
"TAB(15)"5" SORT BY CATEGORY
"TAB(15)"6" WRITE TO AIDS FILE
265 CK=K2
280 ONJGOSDB9500,2000,10000,11000,14000,7000:GOTO220
275 REM THIS LINE IS DELETED
2301 "*****MOD FOR MX00 PRINTERS ONLY *****
2305 IFPEEK(14312)<120THENLPRINTCHR$(15)CHR$(27)CBR$(40):
GOTO2330"MOD FOR MX00 PRINTER 132 CHAR/LINE 00 LINE/PAGE
2400 IFPEEK(16425)>04THENGOSUB2430:GOTO2340:ELBE2360
2420 GOSDB2430:GOTO2040
2430 FF%=00-PEEK(16425):FORIJ=1TOFF%:LPRINT:NEXTIJ:
POKE16425,1:RETURN
3000 POKE16424,00:POKE16425,1:PG=0:CNT=0:EOD=0:KK=0:AB=0
3001 "*****
4500 IFIO=2THENLPRINT:LPRINTTAB(25);"TOTAL=" ";Q
ELSEPRINT:PRINTTAB(25);"TOTAL=" ";Q
6120 Q=Q+C4(KK):LPRINTUBINGF$;C1%(KK);D2;D3;C$;C4(KK);
ABB(AL%(C5%(KK))):RETURN
7000 AIS$="#### % % ####"
7010 IQ%=INSTR(BF$,"/"):IFIQ%<>0THENFI$=LEFT$(BF$,IQ%-1)+
"/AID"ELSEIQ%=INSTR(BF$,""):IFIQ%<>0THENFI$=LEFT$(BF$,IQ%-1)+"/AID"
ELSEFI$=BF$+"/AID"
7020 OPEN"O",2,FI$:ONERRORGOTO0
7025 J=0:CK=K2+K3:FORI=K2+1TOCK:J=J+1:C1%(I)=0:
C2%(I)=E1%(J):C3%(I)=E2%(J):C4%(I)=E3%(J):C5%(I)=E4%(J):NEXTI
7027 GOSUB14000
7030 FORI=1TOCK:PRINT#2,USINGAIS,C1%(I);C2%(I);
C3%(I);C4%(I);ABS(AL%(C5%(I))):NEXTI
7040 CLOBE2:GOSUB135000:GOSUB13000:RETURN
9400 POKE11,I2:POKE14305,0:RETURN
9510 IFDK=1THENLINEINPDT"FILESPEC OF INPUT FILE:
",BF$:OPEN"I",DV,BF$:ONERRORGOTO0
10000 CMD"F",DELETE0-9910
10010 CMD"F",DELETE1000-14000
10020 MERGE"EDIT"
10030 GOTO215
11000 CMD"F",DELETE0-10030
11010 CMD"F",DELETE12000-14000
11020 MERGE"TRANS"
11030 GOTO215
13000 CMD"O",K2,C2%(1),C1%(1),C3%(1),C4%(1),C5%(1),C6%(1):RETURN
13500 CMD"O",CK,-C1%(1),C2%(1),C3%(1),C4%(1),C5%(1),C6%(1):RETURN
14000 CMD"O",CK,C5%(1),C3%(1),C2%(1),C1%(1),C4%(1),C6%(1):RETURN

```

May 82

THE PARALLEL PRINTER PORT

Do you really know what your parallel printer port is doing to your output. When I got my new printer (a DTC 381) I found that none of the commands that did all of those beautiful things it was supposed to do would work. Needless to say that was a bit of a shock! Some discussion with a technical person at DTC soon revealed that a TRS-80 Mod I will not put out an ESC code 27. With that I looked into the code at the port address 82D8H and found that it really filters all codes below 28 and only puts out carriage returns and back spaces after going through a lookup of the number of printed lines. In addition there seems to be no way to address a later point in the code to bypass the filter and all of that other stuff that I now don't need.

All of you who have other printers that do work OK out of the parallel port have a way around that in your printer I suspect. Brian Devendorf suggested that I try codes above 128 which would be the original code plus 128. None of these work for me either although I suspect that this is the way that control codes are sent to the EPSON et al.

If any of you have written or have available an unfiltered parallel printer driver I would appreciate hearing from you. At present I can get things through by sending a poke 37E8H with whatever code I want but that is a bit unwieldy.

Tom Anderson
ANDERSON @ SBUG-80

Send Newsletter articles to:

Editor, South Bay TRS-80 User Group
Robert Byrd
P.O. Box 60116
Sunnyvale, Ca 94088

Deadline for the June newsletter is 5 June 82.

If at all possible send articles via modem or saved on disc/tape. I will see that your disc or tape is returned to you. Thanks . . .

South Bay TRS-80 Users Group
P.O. Box 60116
Sunnyvale, Ca 94088

FIRST CLASS MAIL